

REMARKS

Claims 1-12 and 15-17 are pending in the application. Claim 4 has been amended and claims 16 and 17 have been newly added. Reconsideration of the rejection and allowance of the pending application in view of the following remarks are respectfully requested.

In the Office Action of December 8, 2004, the Examiner rejected claim 4 under 35 U.S.C. § 112, 2nd paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants have amended claim 4 appropriately, and respectfully request withdrawal of the rejection.

In the Office Action, the Examiner also rejected claims 1, 2, 4 and 9 under the doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 5 of U.S. Patent No. 6,636,340 in view of Maruyama (U.S. Patent No. 6,346,957). To overcome this rejection, Applicants have filed herewith a terminal disclaimer disclaiming the terminal part of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,636,340. Accordingly, Applicants respectfully request that the Examiner withdraw the double patenting rejection.

Applicants are filing the terminal disclaimer merely to remove any issue as to whether the claims of the present application and those of U.S. Patent No. 6,636,340 in any way conflict. However, neither Applicants nor the assignee intend to make any representations as to whether the invention defined by the claims of either the application or the patent would have been obvious in view of the other or to acquiesce to the

Examiner's decision that the judicially created double patenting rejection set forth by the Examiner is proper.

In the Office Action, the Examiner also rejected claims 1 and 15 under 35 U.S.C. §102(e) as being anticipated by Maruyama (U.S. Patent No. 6,346,957). Applicants respectfully traverse the rejection for at least the following reasons.

Claim 1 recites a multi-beam scanning device which includes, inter alia, a plurality of optical path turning systems that turn optical paths of deflected light beams. Claim 1 further recites that optical path lengths of the optical paths are substantially the same, and all of the optical path turning systems include an even number of reflection surfaces. Applicants respectfully submit that Maruyama does not disclose this combination of features, along with the other features recited in the claim.

In the Office Action, the Examiner noted that each of the optical path turning systems shown in Figure 14A of Maruyama, which include separating polygon mirror 231 and one of the cylindrical mirrors 232a to 232d, include an even number of reflection surfaces. The Examiner also noted that Maruyama discloses, on page 6, line 66 to page 7, line 6, that "[t]he separating polygon mirror 31 and the beam corresponding optical systems 22a, 22b, 22c, 22d have the structure and the arrangement positions determined to keep the respective optical path lengths between the reflecting deflection point of each light beam in the polygon mirror 29 and the scanned surfaces 23a, 23b, 23c, 23d of the photoreceptor drums 24a, 24b, 24c, 24d concerning four light beams shown in Fig. 1 equal to one another."

However, Applicants draw the Examiner's attention to the fact that Fig. 1 and Fig. 14a refer to two separate embodiments of Maruyama's invention. In the embodiment shown in Fig. 1, each of the optical path turning systems, comprising separating polygon mirror 31 and one of the reflecting members 32a, 32b, 32c, and 32d, include three reflection surfaces, as each of the reflecting members 32a, 32b, 32c, and 32d include two mirror surfaces for reflecting a light beam. See Fig. 1 and col. 6, lines 56-62. Thus, the optical path turning systems of the embodiment of Fig. 1 do not include an even number of reflection surfaces.

Furthermore, Maruyama does not disclose that the optical path lengths of the optical paths of the embodiment of Fig. 14A are substantially the same. Clearly they are not. Therefore, Maruyama does not disclose a single embodiment of his invention in which optical path lengths of the optical paths are substantially the same, and all of the optical path turning systems include an even number of reflection surfaces. Furthermore, Maruyama does not suggest combining the attributes of different embodiments of his invention to arrive at a single embodiment in which optical path lengths of the optical paths are substantially the same, and all of the optical path turning systems include an even number of reflection surfaces. By providing these features in distinct embodiments, Maruyama implies that these features are not combinable.

For at least these reasons, Applicants respectfully submit that the Examiner's rejection of claim 1 is improper, and request withdrawal of the rejection.

Dependent claim 15 is also submitted to be in condition for allowance at least in view of its dependence on claim 1.

In the Office Action, the Examiner also rejected claims 2-9 under 35 U.S.C. § 103(a) as being unpatentable over Maruyama in view of Tanaka et al. (U.S. Patent No. 6,473,105). Dependent claims 2-9 are submitted to be in condition for allowance at least in view of their dependence on claim 1. Independently of the above, Tanaka is not a valid prior art reference because its filing date, November 10, 2000, is later than Applicants' effective filing date, March 30, 2000, which is the filing date of Applicants' foreign priority document, Japanese Application No. 2000-092692. For at least these reasons, Applicants respectfully submit that the Examiner's rejection is improper, and request withdrawal thereof.

The Examiner also rejected claims 10-12 under 35 U.S.C. § 103(a) as being unpatentable over Maruyama in view of Tanaka et al. and further in view of Kamikubo (U.S. Patent No. 6,115,164). Dependent claims 10-12 are submitted to be in condition for allowance at least in view of their dependence on claim 1. Furthermore, as noted above, Tanaka is not a valid prior art reference. For at least these reasons, Applicants respectfully request withdrawal of the rejection.

Applicants also submit that newly added dependent claims 16 and 17 are in condition for allowance at least in view of their dependence on claim 1, and because Maruyama's optical path turning systems do not converge the deflected light beams on a plurality of objects arranged in a plane substantially parallel to the deflected light beams, as recited in claim 16, and do not reflect the deflected light beams an even number of times, as recited in claim 17.

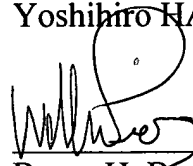
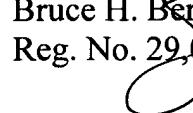
Based on the above, it is respectfully submitted that this application is now in condition for allowance, and a Notice of Allowance is respectfully requested.

SUMMARY AND CONCLUSION

Entry and consideration of the present amendment, reconsideration of the outstanding Office Action, and allowance of the present application and all of the claims therein are respectfully requested and now believed to be appropriate. Applicant has made a sincere effort to place the present invention in condition for allowance and believes that he has now done so.

Should the Examiner have any questions or comments regarding this response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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